

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A method for hemostasis of a puncture site in a blood vessel at an end of a tissue tract, the method comprising:
 - providing a compression member having a proximal end and a distal end and an expandible element disposed at the distal end thereof;
 - inserting the compression member through an opening in a skin surface;
 - positioning a distal end of the expandible element at a predetermined distance away from a wall of the blood vessel; and
 - expanding the expandible element within the tissue tract and against subcutaneous tissue.
2. (Original) The method of claim 1, wherein the expandible element is only engageable against subcutaneous tissue surrounding the blood vessel wall.
3. (Original) The method of claim 1, wherein the predetermined distance is in a range from about 0.05 inch to about 0.5 inch .
4. (Original) The method of claim 3, wherein the predetermined distance is in a range from about 0.2 inch to about 0.3 inch.
5. (Original) The method of claim 1, wherein the expandible element comprises a balloon.
6. (Original) The method of claim 5, wherein expanding comprises at least one of axial or radial dilation of the balloon so as to cause compression of the subcutaneous tissue surrounding the blood vessel wall.

7. (Original) The method of claim 5, wherein expanding comprises inflating a superior aspect of the balloon greater than an inferior aspect of the balloon.

8. (Original) The method of claim 5, wherein expanding comprises inflating a distal face of the balloon at an angle to the compression member similar to an angle formed between the compression member and the blood vessel.

9. (Original) The method of claim 5, wherein expanding comprises inflating the balloon to a deployed configuration comprising a conical shape.

10. (Original) The method of claim 5, wherein expanding comprises unfolding concentric folds of the balloon.

11. (Original) The method of claim 5, wherein expanding comprises inflating the balloon to a deployed configuration having a concave distal end.

12. (Original) The method of claim 1, further comprising providing a locating member having a proximal end and a distal end and an expansible member disposed on the distal end thereof.

13. (Original) The method of claim 12, further comprising inserting the locating member through the opening in the skin and in the puncture site prior to or simultaneously with compression member insertion.

14. (Original) The method of claim 13, further comprising deploying the expansible member to an expanded configuration within the blood vessel having a diameter in a range from about 0.05 inch to about 0.5 inch.

15. (Original) The method of claim 14, further comprising locating the puncture site in the blood vessel wall.

16. (Original) The method of claim 15, further comprising providing temporary hemostasis of the puncture site with a plug coupleable to the distal end of the locating member.

17. (Original) The method of claim 16, further comprising contracting and withdrawing the locating member.

18. (Original) The method of claim 1, further comprising imaging the expandible element during positioning.

19. (Original) The method of claim 1, further comprising delivering radio frequency energy, ultrasound energy, or microwave energy to the puncture site.

20. (Original) The method of claim 1, further comprising delivering a clot promoting agent or anti-infection agent to the puncture site.

21. (Withdrawn) A kit comprising:
a compression member; and
instructions to use the compression member for hemostasis of a puncture site in a blood vessel according to claim 1.

22. (Withdrawn) A system for hemostasis of a puncture site in a body lumen, the device comprising:

a locating member having a proximal end and a distal end and an expandible member disposed on the distal end thereof; and

a compression member at least partially coaxial with the locating member, the compression member having a proximal end and a distal end and an expandible element disposed at the distal end thereof, wherein a distal end of the expandible element is positionable at a predetermined distance away from a wall of the body lumen.

23. (Withdrawn) The system of claim 22, further comprising deployment means coupleable to the proximal end of the locating member so as to move the expandible member between a contracted configuration and an expanded configuration.

24. (Withdrawn) The system of claim 23, wherein the expandible member in the expanded configuration has a diameter in a range from about 0.05 inch to about 0.5 inch.

25. (Withdrawn) The system of claim 24, wherein the expandible member in the expanded configuration has a diameter in a range from about 0.15 inch to about 0.30 inch.

26. (Withdrawn) The system of claim 22, wherein the expandible member comprises stainless steel, shape memory material, or superelastic material.

27. (Withdrawn) The system of claim 22, further comprising a temporary hemostasis member coupleable to the distal end of the locating member.

28. (Withdrawn) The system of claim 27, wherein the expandible element is disposed between the distal end of the compression member and a proximal end of the temporary hemostasis member.

29. (Withdrawn) The system of claim 22, further comprising a deformable membrane at least partially disposed over the expandible member.

30. (Withdrawn) The system of claim 22, wherein the locating member and compression member form an integrated catheter assembly.

31. (Withdrawn) The system of claim 22, wherein the compression member remains proximal a distal end of the expandible member.

32. (Withdrawn) The system of claim 31, further comprising mechanical or visual means on the locating member or compression member.

33. (Withdrawn) The system of claim 31, wherein the predetermined distance is in a range from about 0.05 inch to about 0.5 inch .

34. (Withdrawn) The system of claim 33, wherein the predetermined distance is in a range from about 0.2 inch to about 0.3 inch.

35. (Withdrawn) The system of claim 31, wherein the compression member is fixed relative to the locating member.

36. (Withdrawn) The system of claim 31, wherein the compression member is moveable relative to the locating member.

37. (Withdrawn) The system of claim 22, wherein the locating member is laterally offset from an axis of the compression member.

38. (Withdrawn) The system of claim 22, wherein the expandible element comprises a balloon.

39. (Withdrawn) The system of claim 38, wherein the balloon comprises one or more materials selected from the group consisting of polyethylene, polyethylene terephthalate, polytetrafluoroethylene, nylon, polyurethane, silicone, latex, polyvinyl chloride, and thermoplastic elastomer.

40. (Withdrawn) The system of claim 38, wherein the balloon is pre-formed or pre-molded symmetrically or asymmetrically.

41. (Withdrawn) The system of claim 38, wherein the balloon has a deployed configuration comprising a conical shape.

42. (Withdrawn) The system of claim 38, wherein the balloon comprises a plurality of concentric folds that are unfolded in a deployed configuration.

43. (Withdrawn) The system of claim 38, wherein the balloon has a deployed configuration comprising a concave distal end.

44. (Withdrawn) The system of claim 38, wherein the balloon further comprises a radio-opaque material.

45. (Withdrawn) The system of claim 38, further comprising a coating on an outer surface of the balloon.

46. (Withdrawn) The system of claim 45, wherein the coating comprises electrically conductive material for the delivery of energy.

47. (Withdrawn) The system of claim 46, wherein the energy comprises radio frequency energy or microwave energy.

48. (Withdrawn) The system of claim 45, wherein the coating comprises a clot promoting or anti-infection agent.

49. (Withdrawn) The system of claim 38, wherein the balloon comprises a semi-permeable membrane.

50. (Withdrawn) The system of claim 38, further comprising an inflation assembly coupleable to the proximal end of the compression member and in communication with the balloon.

51. (Withdrawn) The system of claim 50, wherein the inflation assembly comprises a source of at least air, fluid, clot promoting agent, anti-infection agent, or radio-opaque medium.

52. (Withdrawn) A device for hemostasis of a puncture site in a body lumen, the device comprising:

a first tubular member having a proximal end and a distal end;

a second tubular member having a proximal end and a distal end and at least partially coaxial with the first tubular member so as to define an inflation lumen therebetween;

a balloon disposed at the distal ends of the first and second tubular members and in communication with the inflation lumen, wherein a distal end of the balloon is positionable behind a locator and at a predetermined distance away from a wall of the body lumen.

53. (Withdrawn) The device of claim 52, wherein the predetermined distance is in a range from about 0.05 inch to about 0.5 inch.

54. (Withdrawn) The device of claim 53, wherein the predetermined distance is in a range from about 0.2 inch to about 0.3 inch.

55. (Withdrawn) The device of claim 52, wherein the balloon comprises one or more materials selected from the group consisting of polyethylene, polyethylene terephthalate, polytetrafluoroethylene, nylon, polyurethane, silicone, latex, polyvinyl chloride, and thermoplastic elastomer.

56. (Withdrawn) The device of claim 52, wherein the balloon is pre-formed or pre-molded symmetrically or asymmetrically.

57. (Withdrawn) The device of claim 52, wherein the balloon has an expanded configuration comprising a conical shape.

58. (Withdrawn) The device of claim 52, wherein the balloon comprises a plurality of concentric folds that are unfolded in an expanded configuration.

59. (Withdrawn) The device of claim 52, wherein the balloon has an expanded configuration comprising a concave distal end.

60. (Withdrawn) The device of claim 52, wherein the balloon further comprises a radio-opaque material.

61. (Withdrawn) The device of claim 52, further comprising a coating on an outer surface of the balloon.

62. (Withdrawn) The device of claim 61, wherein the coating comprises electrically conductive material for the delivery of energy.

63. (Withdrawn) The device of claim 62, wherein the energy comprises radio frequency energy or microwave energy.

64. (Withdrawn) The device of claim 61, wherein the coating comprises a clot promoting or anti-infection agent.

65. (Withdrawn) The device of claim 52, wherein the balloon comprises a semi-permeable membrane.

66. (Withdrawn) The device of claim 52, wherein the balloon comprises an expansible member and a deformable membrane at least partially disposed over the expansible member.

67. (Withdrawn) The device of claim 52, wherein the balloon is inflatable with air, fluid, clot promoting agent, anti-infection agent, radio-opaque medium or a combination thereof.